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APPLICATION NO.	FILING DATE ¹	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/733,624	12/08/2000	David G. Lamphere	1611/122	2412

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EXAMINER

SORKIN, DAVID L

ART UNIT	PAPER NUMBER
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1723

DATE MAILED: 01/16/2003

11

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/733,624

Applicant(s)

LAMPHERE ET AL.

Examiner

David L. Sorkin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on 25 November 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7 and 10.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Information Disclosure Statement

1. Two identical IDSs have been filed, the first filed 23 July 2002 (paper No. 7), the second filed 09 December 2002 (paper No. 10).
2. In the second IDS (paper No. 10) all references have been crossed off by the examiner to avoid duplication upon publication; however, all references listed have been considered.
3. In the first IDS (paper No. 7) the listing of Hein (US 3,456,875) has been crossed off solely because it was already listed in the Notice of References Cited in paper No. 6. The reference has been considered.

Drawings

4. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 25 November 2002 have been approved. Corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
6. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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7. In independent claim 1, it is unclear if the "flat wall" is a required element of the claimed structure.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1, 2, 4 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Asmussen (US 2,179,807). Regarding claim 1, Asmussen ('807) discloses a set comprising a fluid port (15) and a variable volume chamber in fluid communication with the fluid port, the chamber defined by a fixed wall (11) and an elastic wall (9), the elastic wall formed by a convoluted diaphragm. While it is unclear if any "flat wall" is a required element of the claimed structure, or if the "flat wall" is only mention in the claim with regard to an intended use of the claimed structure, Asmussen ('807) discloses that the elastic wall is substantially adjacent a flat wall (7) in an unstretched state. Also, the elastic wall is substantially adjacent a flat wall (6) in an unstretched state. Regarding claim 2, a rotary seal (16) is coupled to the fluid port and the rotary seal (16) is fluidly coupled to the chamber. Regarding claim 4, the shaped diaphragm has at least one fold (see drawing). Regarding claim 5, the diaphragm has a plurality of folds, the folds located symmetrically about an axis (see drawing).

10. Claims 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Headley et al. (US 5,733,253). Headley ('253) discloses a set comprising a fluid port

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(13/83) and a variable-volume chamber in fluid communication with the fluid port, the chamber defined by a fixed wall (40) and an elastic wall (31) formed by a shaped diaphragm; and a rotary seal (48) fluidly coupled to the chamber. The diaphragm is essentially planar in its unstretched state (see col. 9, lines 8 and 9). As seen Figs. 2, 3, 4, 9, and more clearly in Figs. 11, 12, 13, 16-18, 19A-19E, the diaphragm (31), has a circumferential O-ring like portion of greater thickness than the remaining portion of the diaphragm.

Response to Arguments

11. Applicant states on page 3 of paper No. 8, Headley [US 5,885,239] "discloses an elastic wall 31 formed by a convoluted diaphragm". According to Merriam-Webster's Collegiate Dictionary, 10th edition, "convoluted" means "having convolutions", and "convolution" means "a form or shape that is folded in curved or tortuous windings". Therefore, the examiner does not consider that Headley ('239) discloses a convoluted diaphragm. Applicant is asked to explain on the record why applicant believes that Headley ('239) discloses a convoluted diaphragm, so that the meaning of convoluted is clear on the record.

12. Applicant's arguments regarding Headley ('239), Neu ('164) and Lord ('457) are otherwise moot, because none of these references has been relied upon in the current office action.

13. The examiner disagrees with applicant's assertion that Asmussen ('807) does not disclose an elastic wall substantially adjacent a flat wall. Asmussen ('807) discloses

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elastic wall (8) which is substantially adjacent flat wall (6) and which is substantially adjacent flat wall (7).

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

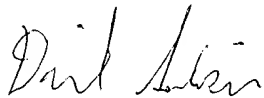
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David L. Sorkin whose telephone number is 703-308-1121. The examiner can normally be reached on 8:00 -5:30 Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda L. Walker can be reached on 703-308-0457. The fax phone numbers for the organization where this application or proceeding is assigned are 703-

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872-9310 for regular communications and 703-872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



David Sorkin

January 13, 2003



CHARLES E. COOLEY
PRIMARY EXAMINER